

master of the vessel, invariably took the precaution of selecting some spot in the direct line of its progress, that is, in the main channel, where, he said, there was less danger to be apprehended than in the neighbourhood of the shores, in consequence of the recoil or curl of the tide along shore, and the falling in of the loose banks. The bore appeared to set in like a straight wall of water with a head of five or six feet, each succeeding wave decreasing more and more, till the whole gulf was reduced to the same level with the sea without. We heard it approach several minutes before it came upon us, when we were fairly lifted up, and afloat in an instant. The shifting of the sand-banks, the gradual filling in of the rivers, and the formation of extensive bars at their entrances, render new surveys of the whole western coast continually necessary for the safety of the navigation to foreign vessels—but the most important service would be rendered to science by an exact registration of the tides, and observations of the gradual accession of land on the one, or detrition of land on the other coast of India; a service which the East India Company alone can originate and execute satisfactorily.

XV.—*Remarks on the supposed Situation of Minoa and Nisaea.*
By Mr. T. SPRATT, of H.M.S. Beacon. Communicated by
Captain BEAUFORT, Royal Navy, F.R.S., Corr. Inst. France.

THE fortress Minōa of the Megareans, which Thucydides* speaks of as an island, and Strabo† as a promontory or peninsula, appears to agree with a rocky hill surmounted by a ruined fortress, and standing on the margin of the sea south of Megāra, at the distance of little more than a geographic mile; thus agreeing with the distance given by Thucydides, who calls it about eight stadia.‡

That this hill was once a peninsula, appears evident from the dry beds of two rivers which pass close to its base; one on each side. The eastern bed winds round the back of the hill, leaving only a narrow neck of elevated ground between it and that on the west side: and it is therefore clear, that when these two rivers had communication with the sea, the intermediate neck of land, with this hill, would have been a peninsula, or promontory.

These two river-beds were once the only outlets of the moun-

* Thucyd. iii. 51.

† Beyond [*i. e.* east of] the rocks called Skirōnides, stretches out the point Minōa forming the post at Nisaea; but Nisaea is the harbour (or dock) of the Megarenses, eighteen [read "eight"] stadia distant from the city [of Megara], connected with it by "legs" [skelé, *i. e.* walls] on both sides. This port is also called Minōa. (Strabo, ix. pp. 391-2.)

‡ Thucyd. iv. 66.

tain streams which issue from the valleys on the north side of Mount Geraneia; for the ancient course of the eastern bed, although now ploughed over and cultivated, can be traced through the plain to the northward as far as its junction with that river, whose torrent at present flows in an easterly direction towards the shallow bay of Tikho, crossing the site of the long walls which connected Megara with Nisaea and Minoa, and losing themselves in the swamps bordering that bay. Although vestiges of the walls are not found in the bed of the river, yet, on examining the ground near it, the evidence is convincing that its present course does cross their site, as at a short distance from it, on the Megarean side, their foundations may be traced in a direction transverse to the course of the river, and towards the castellated hill before mentioned.

The dry water course on the western side of this isolated hill can be traced to within two or three hundred yards of the eastern one, and having no communication with any other mountain stream, it may not be unreasonable to suppose that formerly the river split there into two branches or mouths. This hill would then have been an island, as Thucydides calls Minoa; and if it was so in his time, it is not more than probable that the subsequent deposit of earth brought down by this stream, during the four succeeding centuries, which elapsed between his time and that of Strabo, should have joined it to the main by a neck of land or isthmus. To accomplish this, no very great deposit was requisite, as the historian says* "the bridge of communication between Minoa and Nisaea was over a swamp, or morass." But to identify this hill still more clearly with the site of Minoa, it is necessary to discover near it the ruins of the town of Nisaea, which, it appears from Thucydides, was situated at the harbour formed by the island Minoa.

That any considerable remains of the many important edifices mentioned by Thucydides should now be found, cannot be expected, where there is such extensive evidence of the changes undergone in the neighbourhood from the action of the rivulets when swollen by the mountain floods in the rainy season. Indeed, from the level form and small elevation above the sea of the whole plain, it is very probable that the greater part of it is an alluvial deposit. Yet that a town, besides the fortress on the hill, was here, is evident from the many vestiges that are seen on its

* The island was *very* near the continent, for the expression "to the island not far distant from the continent" (Thucyd. iii. 51, near the end) certainly appears from the context to signify *less than a mile*.

The word translated marsh (*risazos*) signifies, according to the Greek lexicographers, "a wet muddy place; mire with a little water on the surface, and plants appearing on the water."

eastern side, between the sea and a low rock which stands in the plain a short distance to the northward. Among these remains are four small heaps of ruins with massive foundations, in one of which there are three broken shafts of small columns erect, and wanting apparently only the fourth to complete the original number. Probably they were monuments, or *temples* ;* and two Greek churches, which are now in ruins, but standing on two ancient foundations, will not be unfavourable to the supposition. Another church, Agios Nicolaos, which is perfect, also occupies the site of an ancient building, but it stands nearer to the sea.

The wall built by Nicias,† the Athenian general, in order to prevent ingress or egress to or from Minoa by the bridge, was hastily thrown up, and it is therefore natural to suppose that it was not a work in which durability was studied ; and, consequently, its entire disappearance does not weaken the conjecture that the above-mentioned ruins were those of Nisaea. On the other hand, the bridge of communication may well be supposed to have been of greater strength, and therefore likely to have some part still remaining. Now, between the base of the hill on its north side, and the opposite bank of the dry bed of a former river, there are three platforms of heavy buildings, one of which lies immediately at the foot of the hill, another on the edge of the opposite bank, and the third nearly central ; and as the course of that former river-bed clearly and indisputably passes between them, it is more than probable that the bridge of communication may be recognised in these ruins ; the general appearance of which in nowise militates against this supposition.

The extent and number of the ancient remains in this plain are, however, too great to be considered as all belonging to Minoa ; and the fortressed hill is equally inconsistent with the idea of the whole being Nisaea, for no mention is made of its having an acropolis, though such a conspicuous and important a strong-hold as this hill could not have remained unnoticed. A division, therefore, of these ruins, appears the only means of determining the site of either Minoa or Nisaea ; and, in the first place, it may be assumed as almost conclusive evidence that the fortified hill was Minoa, and that the ruins in the plain are those of Nisaea, when we state that distinct remains of an ancient mole are to be seen extending from the south-eastern end of this hill, and curving to the eastward, so as to have formed a harbour between the hill and those ruins ; for Strabo expressly says that the port of Nisaea was formed by the island or promontory of Minoa.‡

* Posidonium, Thucyd. iv. 118.

† Strabo, ix. 391.

‡ Thucyd. iii.

The fortress on the hill, which I shall now call *Minoa*, was originally built of courses of quadrangular blocks of limestone quarried from the hill on which it stands; but the greater part of the present ruins are of a more recent date, exhibiting no regularity in either the size or shape of the materials, and intermixed with travertine, and with a soft shelly sandstone often found in the Morea and in Attica. A high tower of the same style of building projects from the north wall, and being similar to those commonly erected by the Venetians, it may help to indicate that the repairs of the fortress were made at the time the country was in their possession.

Although there exists so much evidence in favour of the sites of *Minoa* and *Nisaea* being here, a few remarks on the adjacent coast may be satisfactory. At the distance of nearly half a mile to the eastward of these ruins, there is a small rocky peninsula, and further off two islands, the inner one of which affords shelter to a few of the small class of coasters. It has therefore been supposed, as this is a port of the Megareans of the present day, and formed by an island, that this island was *Minoa*.

That any encroachment either of the land or sea could have taken place, so as to alter the general features of the island or peninsula, is disproved by their rocky shores; for they both, as well as the ridge of hills from which the latter extends, are entirely of a limestone formation, which in its nature is extremely hard. No conjectured uplifting of the land, or fretting away of the coast, can therefore plausibly account for any difference in the locality of this place from the descriptions of Thucydides or Strabo. Now the inner island is distant from the promontory about two hundred yards, with seven fathoms water between them; they could not therefore have been connected by a bridge: nor was the peninsula ever an island, as its isthmus is of equal height with the extremity. Consequently, as both differ so materially from the descriptions of *Minoa*, in two points so necessary to determine its position, and as both are destitute of any remains of either a fortress or habitations, it must be sought for elsewhere.

The long range of hills that terminate in the promontory of *Tikho*,* and from the western end of which the little peninsula juts out, from its proximity to the ruins (supposing the whole of them to be *Nisaea*), might be assumed to be *Minoa*, because it also may have been at one time an island. But Pausanias,† who

* Τίχος? a fort.

† The passage in Pausanias (Attic. xliv.) is as follows:—

"And as they go down [from Megara] to the harbour, still called in our time *Nisaea*, they come to the Temple of Ceres, the sheep-bearer (Ceres ovifera, Demeter malophera),.....Any one might perceive that the roof [of the temple] has fallen

North

MINOA AND NISÆA
IN THE
GULF OF AEGINA

BY
MR T. A. B. SPRATT
OF
H.M.S. BEACON

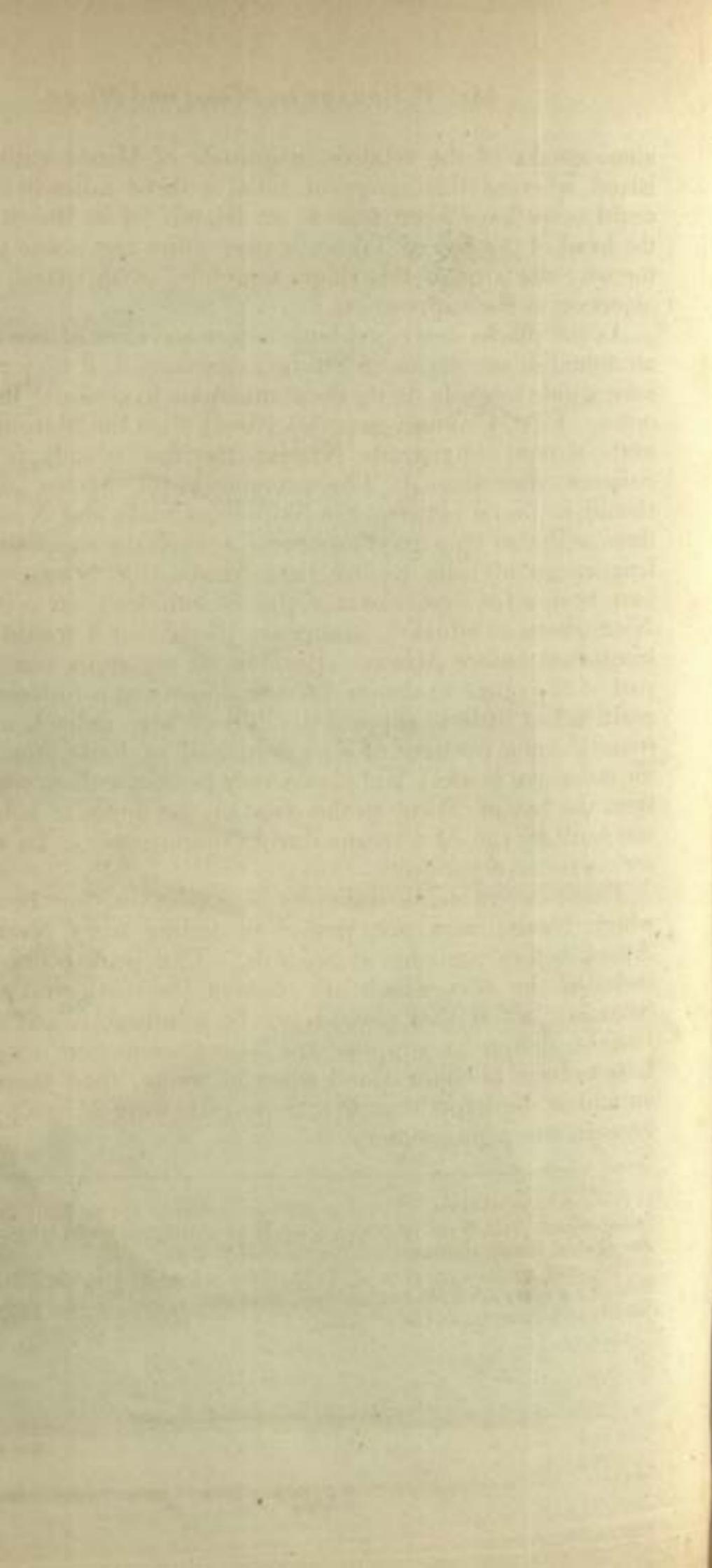
1837.



10 Miles

Nautic Miles

South



alone speaks of the relative magnitude of *Minoa*, calls it a *small* island, whereas this range of hills is three miles in length, and could never have been less as an island, for its lowest part, near the head of the bay of *Tikho*, is twenty-five feet above the level of the sea; the size of this ridge, therefore, as an island, is a strong objection to the supposition.

As the places described both before and after *Minoa* and *Nisaea* are found in succession in Strabo's description, it may perhaps be some guide towards fixing their situations to consider them in that order. First, *Crommyon* is described; then the *Skironides* rocks; next *Minoa*; afterwards *Nisaea*; the five islands follow; and *Salamis* after them. The promontory of *Minoa* in that case should be found between the *Skironides* rocks and *Nisaea*. This, then, will also be a good argument against the supposition of the long range of hills having been *Minoa*, for *Nisaea* would then have been a few stadia nearer the *Skironides* than to it; and had *Nisaea* been so situated, it appears likely that it would have been mentioned before *Minoa*. Besides, as no ruins remain on any part of the range to denote its ever possessing a fortress, the supposition has little to support it. There are, indeed, on each extremity, some portions of a modern wall of loose stones, perhaps for defensive works; and also a very perfect wall across the hill, from the bay of *Tikho* to the coast on the opposite side, but this was built by the *Megareans* during the late war. In short, there are no ruins of antiquity.

There is yet some difficulty in accounting for the five islands which Strabo says are passed in sailing from *Nisaea* towards Attica, before arriving at *Salamis*. The probability is that he included the islet which lies close off the south-west extremity of *Salamis*; but if that should not be admissible, and that we are thereby driven to suppose the above-mentioned long range of hills to have been an island when he wrote, then there is at once an end of the hypothesis that those hills were *Minoa*; for *Minoa*, he says, was a promontory.

in through lapse of time. There is also an *acropolis* there, itself in like manner called *Nisaea*. Near to *Nisaea* there is an island, not large, where Minos, in his war against *Nisus*, stationed the Cretan fleet."

The most accurate version of Thucydides is that by Hobbes; Dr. Bloomfield's, though his notes are useful to scholars, does not appear to be equal to Hobbes' in fidelity and closeness to the original.
